

REMARKS

The Applicant would like to thank Examiner Basichas for the analysis contained in the Examination Report dated August 22, 2006.

It appears that the Examiner did not consider the amendment filed under Article 19 with the International Preliminary Examining Authority in which amended Claims 1-5 as listed above were presented. However, the Applicant has addressed the Examiner's analysis insofar as they relate to the amended claims. Claims 1, 2, 5, 6, and 7 as examined by the Examiner correspond to claims 1, 2, 3, 4, and 5, respectively, as filed with the International Preliminary Examining Authority. These claims are presently amended to remove the reference numerals.

Claim Rejection under 35 U.S.C. § 102

Claims 1 and 5 – 7 (corresponding to Claims 1 and 3–5) currently stand rejected under 35 U.S.C. § 102 as being anticipated by Rasmussen (US Publication No. 2001/0003038). The Applicant respectfully traverses this rejection. Rasmussen (which is the Applicant's former patent application) teaches the use of burners 64, 76, and 92. As can be seen from the FIGS. 1, 2, and 3, these burners extend into the center of the burning chambers in order to come into contact with the combustible gases. It was found that, during use, problems were encountered with the burners or heating elements melting because of the temperatures involved. Claim 1 of the present patent application refers to a housing having a body being made from a heat conducting material. The temperature of the body is maintained at a temperature above the ignition temperature of a combustible mixture of air and combustible gases. This is not taught in the Applicant's previous patent. It is therefore submitted that Claim 1 is not anticipated. It is respectfully submitted that the claims depending upon Claim 1 are also not anticipated.

Claim Rejection under 35 U.S.C. §§ 102/103

Claims 1, 2, and 5-7 (corresponding to Claims 1-5) currently stand rejected as anticipated by or as obvious over Lazare, Domhardt, Kim, Ripple, and Burns. The Applicant respectfully traverses this rejection.

Most of the references cited can quickly be dismissed. They disclose metal igniters that are not unlike those with which the Applicant experienced repeated failures due to melting. Domhardt teaches covering the flare stack opening with an ignition screen through which the gases to be flared must pass. This would not avoid the disadvantage described above in relation to the Applicant's prior application. Kim teaches using a heating wire as an igniter mounted at the gas discharge outlet. Similar to Domhardt, this would not avoid the disadvantage described above with igniters extending into the burning chamber. Ripple also teaches a burner having a heating element extending into a flare stack. Finally, Burns et al. teaches the use of a spark plug as an ignition source to flare the gases. None of the above patents teach a body made from a heat conducting material with flow passageways through the body. Therefore, individually these patents do not teach the Applicant's invention as claimed individually, and in combination they cannot not make up the deficiency. As Claims 2-4 depend directly or indirectly upon Claim 1, it is submitted that these claims are similarly not anticipated or obvious.

Lazare teaches a solid refractory block that has two types of conduits. Gas enters the first, smaller conduit, which is heated by an element, such that the gas within is ignited. The ignited gas then exits the first conduit and acts as an ignition source for gas passing through the larger, second conduit. The gas exiting the smaller conduit acts as a pilot light, while the heating element keeps the pilot light going. It is apparent that the heating element is intended to only heat the smaller pilot light conduit, and not the flare stack generally. However, heating element 4 is partially embedded into the sidewall of the flow passage, protected by insulation. The Applicant has amended Claim 1

to better distinguish over the Lazare reference, by claiming precisely what is illustrated in FIG. 1. Claim 1 now specifies that the flow passage is of constant cross-section and that the heating element is totally encapsulated by the body. These differences are of critical importance. A heating element that relies upon protection from insulation, such as taught by Lazare, will not last at the temperatures involved with gas flaring. The Applicant has specified that the flow passage must be of constant cross-section, to make clear that no claim is being made to the pilot light concept of Lazare.

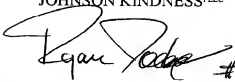
Under the rules of WIPO relating to the processing of the Patent Application, the Applicant was limited to a single independent claim. A new Claim 6 has been added to seek protection for the embodiment of gas flare illustrated in FIG. 2. This claim adopts similar language to Claim 1 regarding the heating element being embedded in and totally encapsulated by the igniter body.

CONCLUSION

In view of the foregoing amendments, it is respectfully submitted that the present application is now in a condition for allowance. The Applicant, therefore, requests entry of the amendments, and the early issue of a Notice of Allowance. If the Examiner has any questions he is invited to contact the applicant's attorney at the number listed below.

Respectfully submitted,

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